

FIG.1

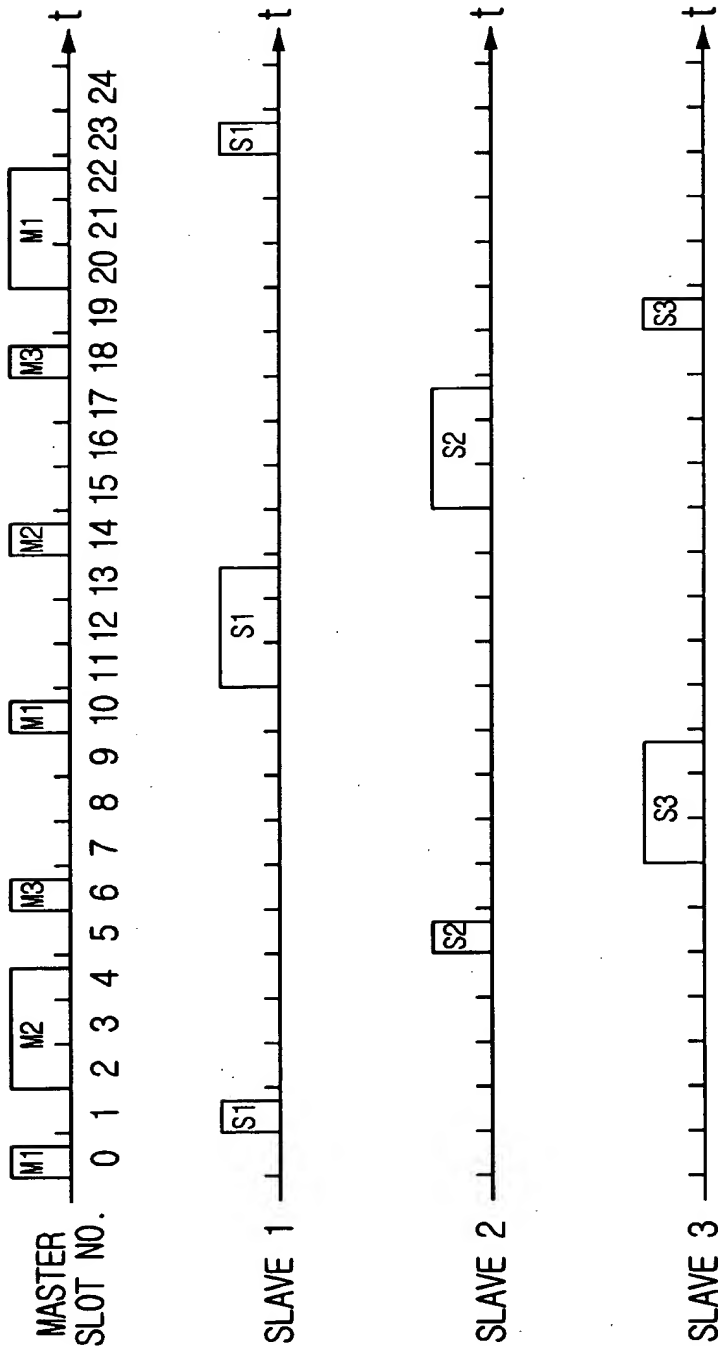


FIG.2

EXTERNAL
DEVICE

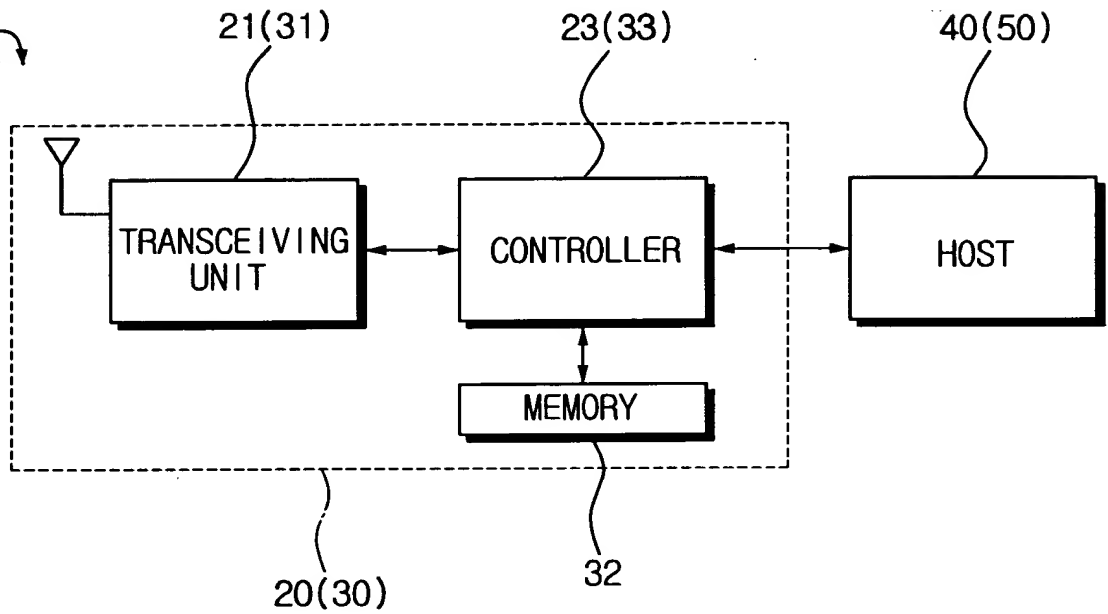


FIG.3

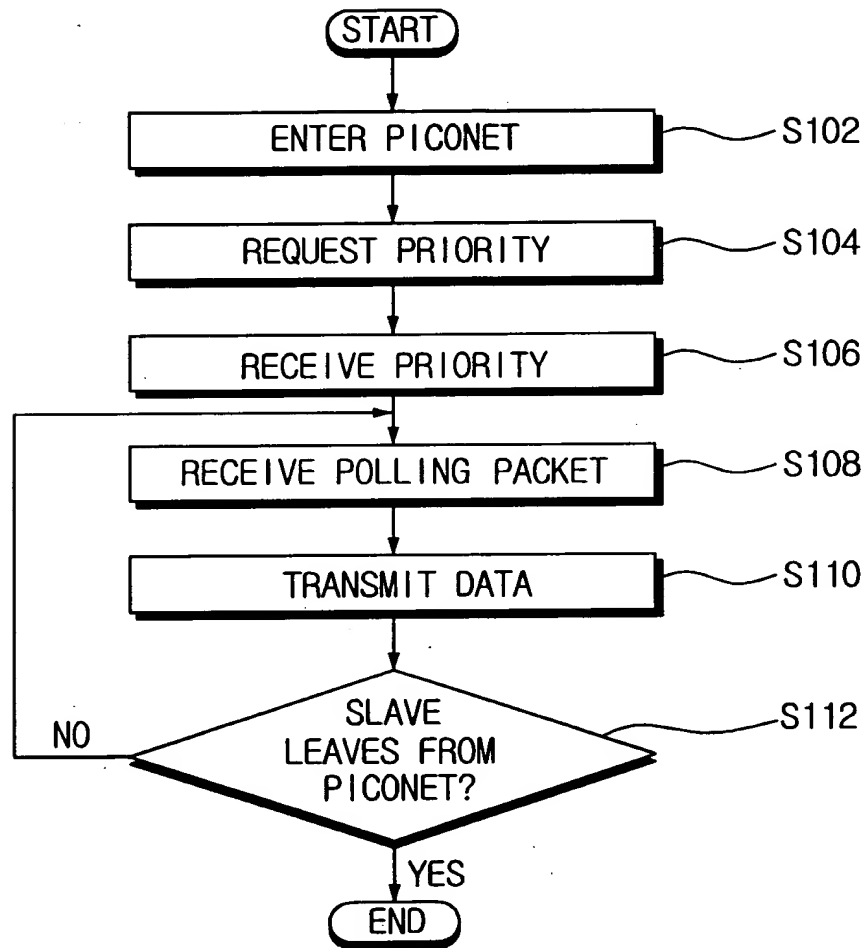


FIG. 4

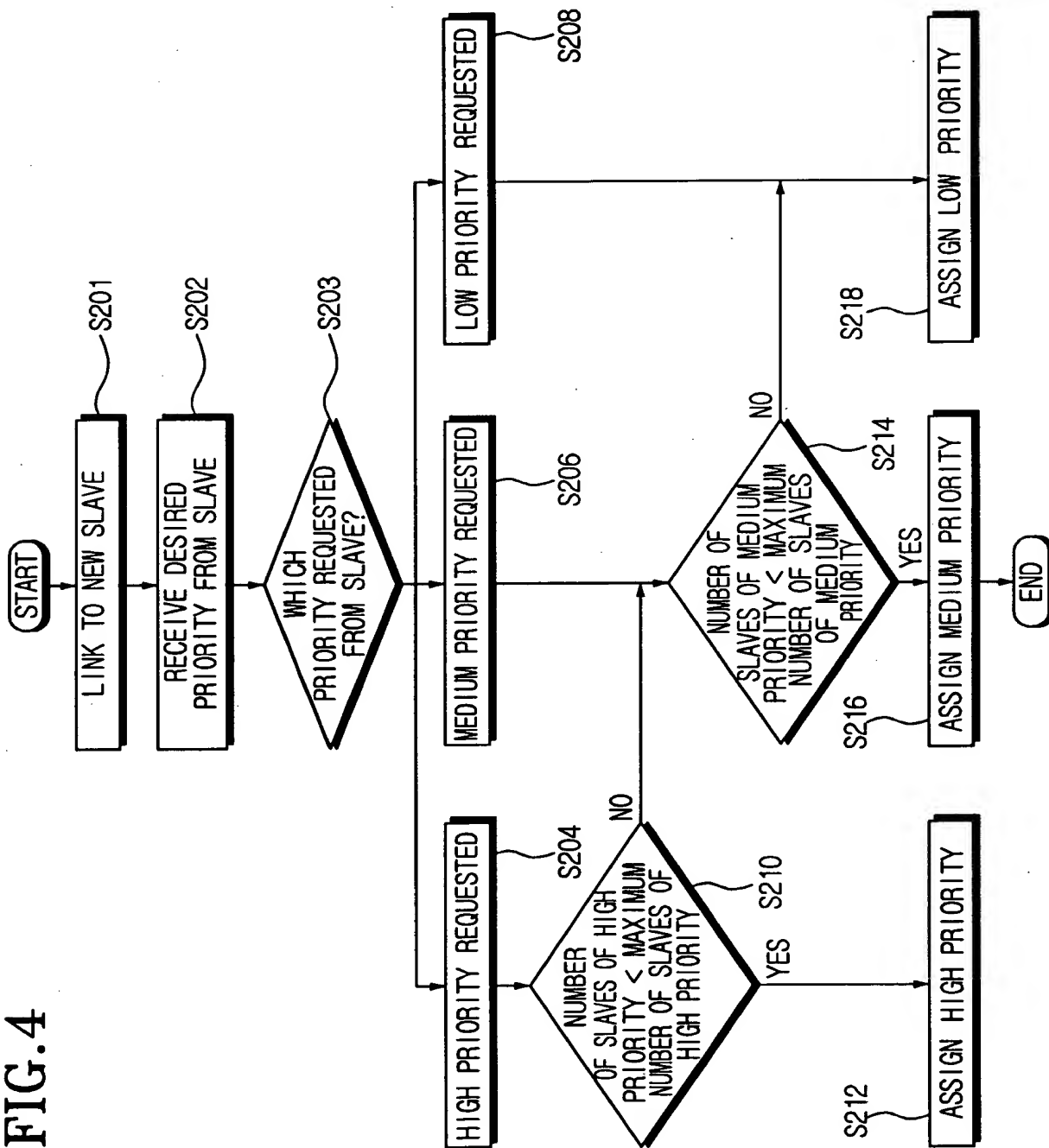


FIG.5

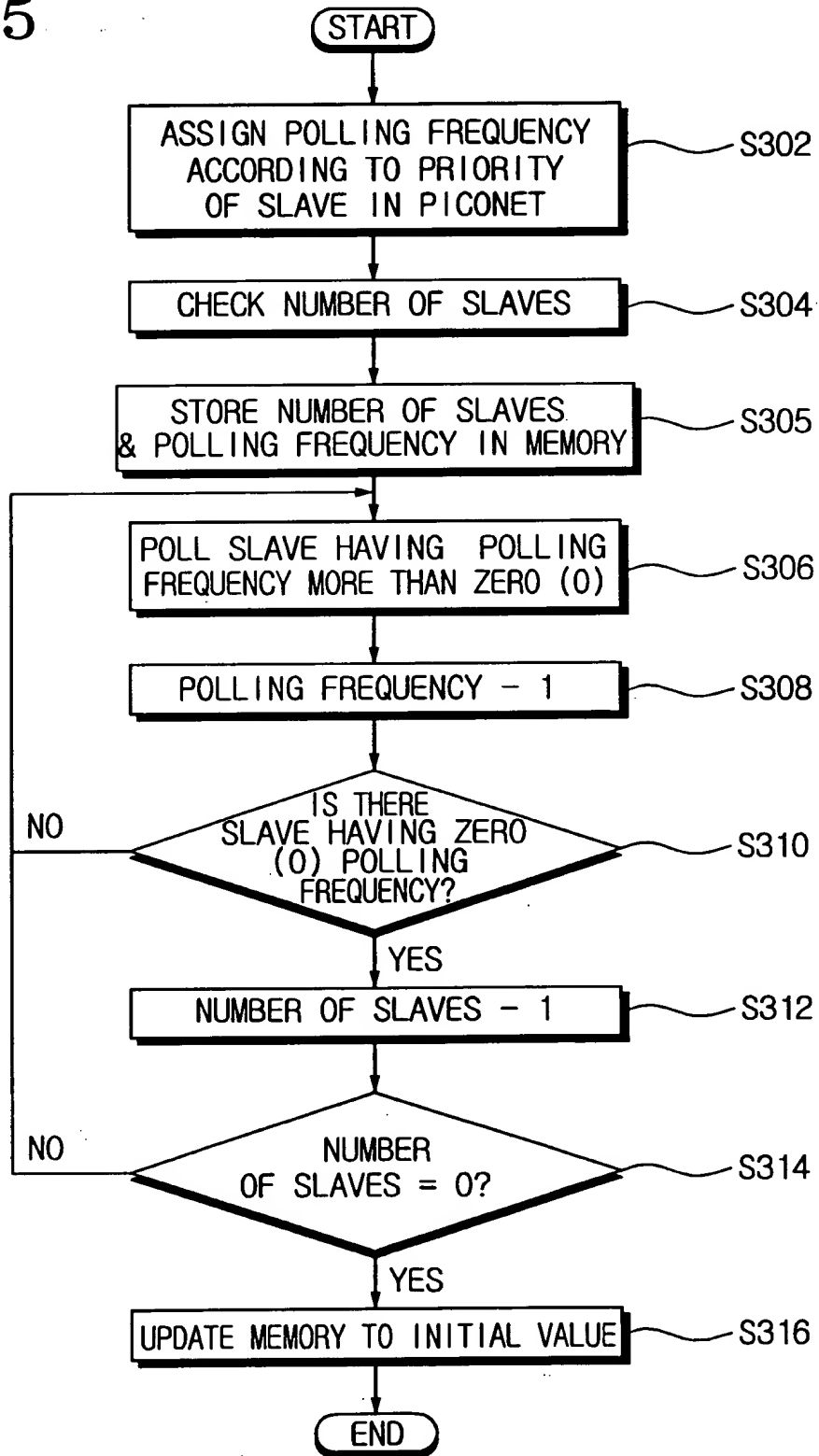


FIG.6

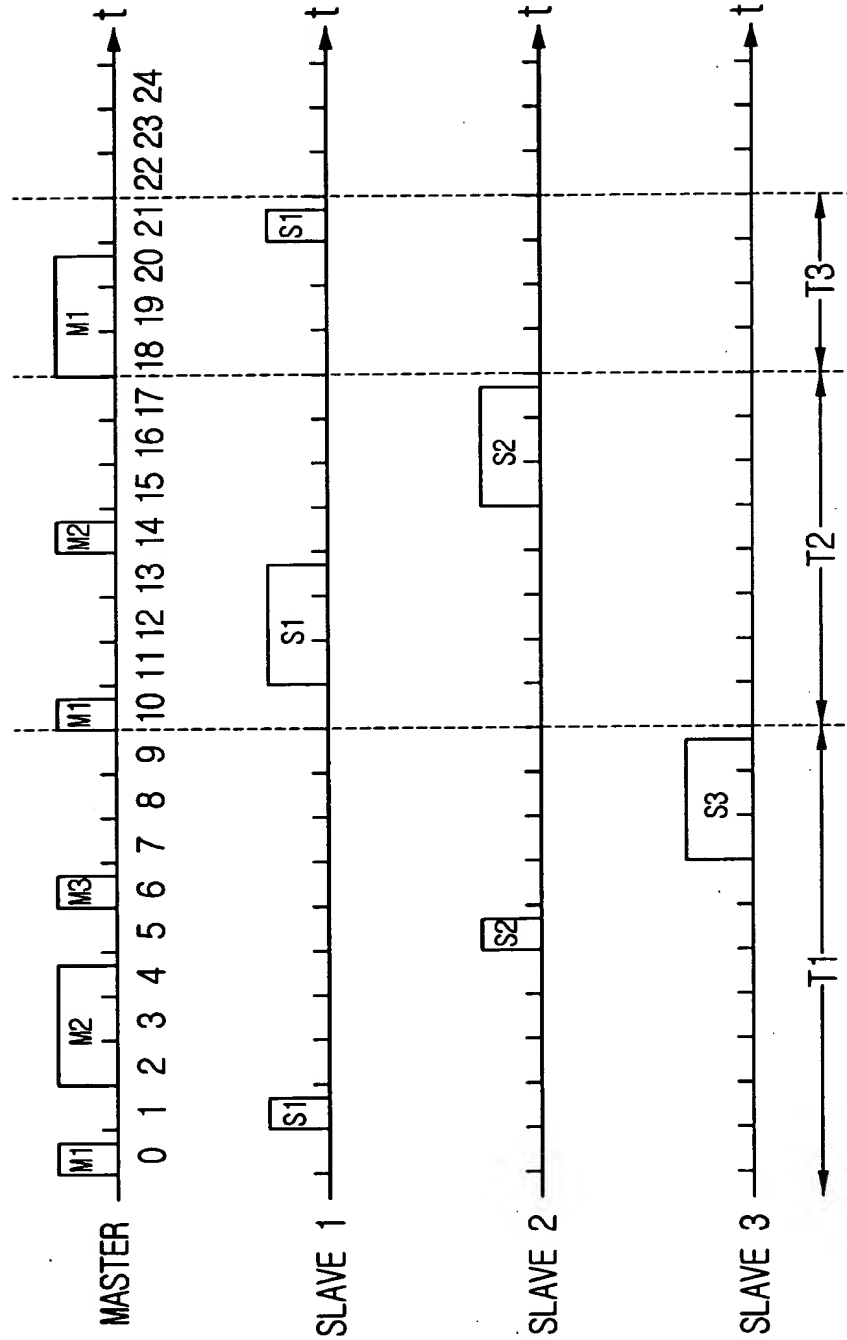


FIG.7

SLAVE	ASSIGNED PRIORITY	POLLING FREQUENCY			
		(t=0)	T1	T2	T3
SLAVE 1	HIGH	3	3→2	2→1	1→0
SLAVE 2	MEDIUM	2	2→1	1→0	.
SLAVE 3	LOW	1	1→0	.	.
COUNT (NUMBER OF SLAVES)		3	2	1	0

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FIG.8A

```

MAIN:
num = 0
count = 0
while (num >= 0)
    if (new_conn == 1)
        num = num + 1
    DECIDE PRIORITY:
        if (new_conn_prio_request == low)
            P(num) = 1
        else if (new_conn_prio_request == medium)
            if (num_of_med_prio <= 1)
                P(num) = 2
            else
                P(num) = 1
            end
        else
            if (num_of_high_prio == 0)
                P(num) = 3
            else if (num_of_med_prio <= 1)
                P(num) = 2
            else
                P(num) = 1
            end
        end
    end
end
end

/* if a new connection comes */

/* if new conn's request == low priority */
/* assign low priority as requested */
/* new conn's request == medium priority */
/* if number of medium priority conn <= 1 */
/* assign medium priority as requested */
/* otherwise, */
/* assign low priority */

/* if new conn's request == high priority */
/* if number of high priority conn == 0 */
/* assign high priority as requested */
/* if number of medium priority conn <= 1 */
/* assign medium priority instead */
/* otherwise, */
/* assign low priority */

/* if an existing connection exits */
if (current_conn_exit == 1)
    num = num - 1
end

```


POLLING:

```

    if (count == 0)
        for j=1:num
            p(j) = P(j)
        end
    end

count = num
for j=1:num
    if (p(j)>0)
        POLL CONNECTION i
        p(j) = p(j) - 1
    else
        count = count - 1
    end
end
end /* while */

```